186 by applying a three-by-three matrix of target optical cross-talk compensation factors **188** to a three-by-one matrix (e.g., vector) of red component input image data **184**, green component input image data **184**, and blue component input image data **184**. In other words, in such embodiments, the optical cross-talk compensation block **154** may determine red component output image data **186** as a sum of a result of application of the target red optical cross-talk compensation factor **188** to the red component input image data **184**, a result of application of the target red-to-green optical cross-talk compensation factor **188** to the green component input image data **184**, and a result of application of the target red-to-blue optical cross-talk compensation factor **188** to blue component input image data **184**. Additionally, the optical cross-talk compensation block **154** may determine green component output image data **186** as a sum of a result of application of the target green-to-red optical cross-talk compensation factor **188** to the red component input image data **184**, a result of application of the target green optical cross-talk compensation factor **188** to the green component input image data **184**, and a result of application of the target green-to-blue optical cross-talk compensation factor **188** to blue component input image data **184**. Furthermore, the optical cross-talk compensation block **154** may determine blue component output image data **186** as a sum of a result of application of the target blue-to-red optical cross-talk compensation factor **188** to the red component input image data **184**, a result of application of the target blue-to-green optical cross-talk compensation factor **188** to the green component input image data **184**, and a result of application of the target blue optical cross-talk compensation factor **188** to blue component input image data **184**.

[0282] As described above, in some embodiments, the output image data **186** may be display image data **147**, which is supplied to an electronic display **12** to enable the electronic display **12** to display corresponding image content on its display panel **38**. In other embodiments, the output image data **186** may be further processed by downstream image processing circuitry **27** to determine the display image data **147**, for example, by at least in part by burn-in compensation (BIC) block and/or a dither block **162**. In this manner, the techniques described in the present disclosure may enable an electronic device to adaptively adjust optical cross-talk compensation applied to image data, which, at least in some instances, may facilitate reducing perceivability and/or likelihood of color shift resulting from optical cross-talk occurring in display image content and, thus, improving perceived image quality of the displayed image content.

[0283] The specific embodiments described above have been shown by way of example, and it should be understood that these embodiments may be susceptible to various modifications and alternative forms. It should be further understood that the claims are not intended to be limited to the particular forms disclosed, but rather to cover all modifications, equivalents, and alternatives falling within the spirit and scope of this disclosure.

[0284] It is well understood that the use of personally identifiable information should follow privacy policies and practices that are generally recognized as meeting or exceeding industry or governmental requirements for maintaining the privacy of users. In particular, personally identifiable information data should be managed and handled so as to minimize risks of unintentional or unauthorized access or use, and the nature of authorized use should be clearly indicated to users.

What is claimed is:

1. An electronic device comprising:

an electronic display, wherein the electronic display comprises a display pixel implemented at a pixel position on a display panel and the display pixel comprises a first color component sub-pixel and a second color component sub-pixel; and

image processing circuitry configured to process image data corresponding with image content to be displayed on the display panel of the electronic display at least in part by:

receiving input image data corresponding with the pixel position of the display pixel in the image content to be displayed on the display panel, wherein the input image data comprises first color component input image data corresponding with the first color component sub-pixel and second color component input image data corresponding with the second color component sub-pixel;

determining a target first color optical cross-talk compensation factor and a target first color-to-second color optical cross-talk compensation factor to be applied to the input image data based at least in part on the pixel position of the display pixel and a target optical cross-talk compensation factor map; and

determining output image data corresponding with the display pixel at least in part by applying the target first color optical cross-talk compensation factor to the first color component input image data and the target first color-to-second color optical cross-talk compensation factor to the second color component input image data to facilitate offsetting color shift resulting from optical cross-talk between the first color component sub-pixel and the second color component sub-pixel.

2. The electronic device of claim **1**, wherein:

the first color component sub-pixel is a first color;

the second color component sub-pixel is a second color different from the first color; and

the image processing circuitry is configured to:

determine a target second color optical cross-talk compensation factor and a target second color-to-first color optical cross-talk compensation factor based at least in part on the pixel position of the display pixel and the target optical cross-talk compensation factor map; and

determine the output image data corresponding with the display pixel at least in part by applying the target second color-to-first color optical cross-talk compensation factor to the first color component input image data and the target second color optical cross-talk compensation factor to the second color component input image data to facilitate offsetting color shift resulting from optical cross-talk between the first color component sub-pixel and the second color component sub-pixel.

3. The electronic device of claim **1**, wherein:

the first color component sub-pixel is a first color;

the second color component sub-pixel is a second color different from the first color;